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FROM: Daniel Scolnick

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SENDER'S FAX: 215-701-2029

OF PAGES (INCLUDING COVER):

FILE NAME: ISIS0058-100/RTS-0212

Serial No.: 09/954,679

DATE: September 2, 2003

FILE #: 136684

RECIPIENT(S)	Company	FAX
Examiner Karen A. LaCourciere	USPTO	703-746-5206

MESSAGE: OFFICIAL FAX! TO EXAMINER Karen A. LaCourciere

Serial No.: 09/954,679 Filing Date: September 12, 2001

Attachments: Transmittal Form (1 Sheet)

Power of Attorney with Revocation and Change of Correspondence

Address (1 Sheet)

Statement Under 37 CFR 3.73 (b)

Table A (Listing Application Serial No.: 09/954,679) (4 Sheets)

Copy of executed Assignment (3 Sheets)

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Please type a plus sign (+) inside this		U.S. Patent and Tradema	rk Office: U.S.	PTO/SB/21 (08-00) ugh 10/31/2002. OMB 0651-0031 DEPARTMENT OF COMMERCE 1 displays a valid OMB control number.
		Application Number	09/954,6	79
TRANSMITT	AL	Filing Date	Septemb	er 12, 2001
FORM		First Named Inventor	Donna Т	. Ward
(to be used for all correspondence a	fter initial filing)	Group Art Unit	1635	
		Examiner Name	Karen A.	LaCourciere
Total Number of Pages in This Submi	ssion	Attorney Docket Number	ISIS0058	3-100/RTS-0212
	ENCL	DSURES (check all that apply)		
Fee Transmittal Form		ment Papers Application)	After A	Allowance Communication to
Fee Attached	☐ Drawin	g(s)		l Communication to Board of is and interferences
Amendment / Response	Licensi	ing-related Papers	Appea (Appea	ll Communication to Group Il Nolice, Brief, Reply Brief)
After Final	Petition	1	Propri	etary Information
Affidavits/declaration(s)		n to Convert to a lonal Application	Status	Letter
Extension of Time Request	Power and Ch	of Attorney with Revocation nange of Correspondence		Enclosure(s) Identify below):
Express Abandonment Request		al Disclaimer st for Refund	Sta	ble A atement Under 37 CFR 3.73(b) th executed Assignment
Information Disclosure Statemen	CD. Nu	umber of CD(s)		
Certified Copy of Priority Document(s)	Rema	rks		
Response to Missing Parts/ Incomplete Application				
Response to Missing Parts under 37 CFR 1.52 or 1.53				
810	SNATURE OF	APPLICANT, ATTORNEY, C	OR AGENT	
Firm or Daniel M. Sco	olnick/ 52,201			
	el bear	hick		
Date 9/1/2	el bear			
		RTIFICATE OF MAILING		
I hereby certify that this corresponds Service with sufficient postage as Alexandria, VA 22313-1450 on the di	first class mail in	simile transmitted to the USPTC an envelope addressed to: C	or deposited commissioner	with the United States Postal for Patents, P.O. Box 1450,
	l. Scolnick/52,201			
Signature	neel Se	eluca.	Date	September 2, 2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depositing upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, U.S. Patent and Tredemark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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PATENTS

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PAYENT TRADEMARK OFFICE

07/23/2003 13:12 FAX 760 603 \$820

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

Sir:

POWER OF ATTORNEY WITH REVOCATION AND CHANGE OF CORRESPONDENCE ADDRESS

I hereby revoke all previous powers of attorney or authorizations of agent given in the patents/applications identified in Table A attached hereto, and appoint real BAR COR 41 B BERE

Practitioners at Customer Number: 34138 as my/our attorney(s) or agent(s) to prosecute the patents/applications identified in Table A. and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the Correspondence Address for the patent applications identified in Table A to:

X Practitioners at Customer Number: 34138

I am the: Applicant/inventor. Assignce of record of the entire interest. (A statement under 37 CFR 3.73(b) is enclosed.)

Respectfully submitted,

ISIS PHARMACEUTICALS, INC.

Date: 7/22/20052

Name: B, Lynne Parshall Title: Executive Vice President

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07/23/2005 13:12 FAX 760 603 3820

PATENTS

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Assistant Commissioner for Patents Washington, DC 20231

Sir:

STATEMENT UNDER 37 CFR 3.73(b)

Applicant, ISIS Pharmacenticals, Inc., a corporation, states that it is:

X the assignee of the entire right, title, and interest of the patents/applications identified in Table A attached hereto.

The extent (by, percentage) of its ownership interest is 100% in the patents/applications identified in Table A.

By:

a copy of the pertinent assignment from the inventor(s) of the patent applications identified in Table A is enclosed herewith.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assigned.

Respectfully submitted,

ISIS PHARMACEUTICALS, INC.

Date: 7/22/2003

Name! B. Lynne Parshall

Title: Executive Vice President

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Serial No.	Filing Date	Inventor(s)	Examiner	Art	TH
Patent No.	issue Date			Cnk	
09/577,902 6,284,538 ISISO04-102	May 24, 2000 September 4, 2001	B. Monia et al.	M. Schmidt	1635	ANTISENSE INHIBITION OF PTEN EXPRESSION
09/048,810 6,238,921 ISIS0052-101	March 26, 1998 May 29, 2001	L. Miraglia et al.	M. Shibuya	1635	ANTISENSE OLIGONUCLEOTIDE MODULATION OF HUMAN MDM2 EXPRESSION
09/280,805 6,184,212 ISIS0052-102	March 26, 1999 February 6, 2001	L. Miraglia et al.	J. Epps	1635	ANTISENSE MODULATION OF HUMAN MDM2 EXPRESSION
09/731,457 ISIS0053-100	December 6, 2000	I. Popoff et al.	J. Schultz	1635	ANTISENSE MODULATON OF DAMAGE SPECIFIC DNA BINDING PROTEIN 1. P127 EXPRESSION
09/659,860 ISIS0054-100	September 11, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 7 EXPRESSION
10/007,078 ISIS0055-100	November 8, 2001	D. Ward et al.	J. Schultz	1635	ANTISENSE MODULATION OF EIF2C1 EXPRESSION
09/963,611 ISIS0056-100	September 13, 2001	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF PROTEIN KINASE R EXPRESSION
09/715,983 ISIS0057-100	November 20, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF PI3K P85 EXPRESSION
09/344,521 6,100,090 ISISO057-101	June 25, 1999 August 8, 2000	B. Monia et al.	J. Zara	1635	ANTISENSE INHIBITION OF PI3K P85 EXPRESSION
09/954,679 ISISO058-100	September 12, 2001	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RIBONUCLEASE L EXPRESSION
09/484,617 6,303,374 ISISO059-100	Jenuary 18, 2000 October 16, 2001	H. Zhang et al.	S. McGarry	1635	ANTISENSE MODULATION OF CASPASE 3 EXPRESSION

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Serial No.	Filing Date Issue Date	Inventor(s)	Examin r	Salt Call	TRIB
Docket N . 09/679,298 6,566,131	October 4, 2000 May 20, 2003	L. Cowsert	M. Schmidt	1635	ANTISENSE MODULATION OF SMADE EXPRESSION
1S1S0060-100 09/679,299 6,566,135	October 4, 2000 May 20, 2003	A. Watt	J. Zara	1635	ANTISENSE MODULATION OF CASPASE 6 EXPRESSION
6,444,466 (SISO062-100	May 10, 2001 September 3, 2002	D. Ward et al.	J. LeGuyader	1635	ANTISENSE MODULATION OF HELICASE- MOI EXPRESSION
10/001,863 ISIS0063-100	November 19, 2001	J. Karras et al.	To Be Determined	1645	ANTISENSE MODULATION OF TOLL-LIKE RECEPTOR 4 EXPRESSION
09/865,993 ISIS0064-100	May 25, 2001	B. Monia et al.	J. Zara	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 5 EXPRESSION
09/667,018 ISIS0065-100	September 20, 2000	H. Zhang et al.	J. Schultz	1635	ANTISENSE MODULATION OF CASPASE 2 EXPRESSION
10/271,887 ISIS0066-100	October 15, 2002	H. Zhang et al.	To Be Determined	1635	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
09/659,845 6,492,170 ISIS0066-101	September 11, 2000 December 10, 2002	A. Watt	A. Wang	1639	ANTISENSE MODULATION OF CASPASE 9 EXPRESSION
10/309.362 ISIS0067-100	December 3, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECOLS EXPRESSION
10/238,443 ISISO067-101	September 9, 2002	D. Ward et al.	To Be Determined	1635	ANTISENSE MODULATION OF RECOLS EXPRESSION
09/798,185 ISISO067-102	March 1, 2001	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RECOLS EXPRESSION
09/798,096 6,399,378 ISISO068-100	March 1, 2001 June 4, 2002	D. Ward et al.	S. McGarry	1635	ANTISENSE MODULATION OF RECOL2 EXPRESSION

Serial No.	Filing Date	Inventor(s)	Examiner	¥	Title
Patent No. Docket N .	Issue Date			ii ii ii	
09/792,594 6,436,706 ISIS0069-100	February 23, 2001 August 20, 2002	D. Ward et al.	K. Lacourciere	1635	ANTISENSE MODULATION OF RECOL4 EXPRESSION
09/793,807 ISIS0070-100	February 23, 2001	D. Ward et al.	J. Zara	1635	ANTISENSE MODULATION OF RECOL EXPRESSION
09/358,361 6,020,199 ISIS0071-100	July 21, 1999 February 1, 2000	B. Monia et al.	M. Schmidt	1635	ANTISENSE MODULATION OF PTEN EXPRESSION
10/006,430 ISIS0072-100	December 10, 2001	M. Graham et al.	S. McGarry	1635	ANTISENSE MODULATION OF CD81 EXPRESSION
10/175,492 ISIS0073-100	June 17, 2002	K. Dobie et al.	To Be Determined	1645	ANTISENSE MODULATION OF PAZ/PIWI DOMAIN CONTAINING PROTEIN EXPRESSION
10/199,221 ISIS0074-100	July 18, 2002	B. Monia et al.	J. Epps	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 6 EXPRESSION
09/487,444 6,159,697 ISIS0075-100	January 19, 2000 December 12, 2000	B. Monia et al.	A. Wang	1635	ANTISENSE MODULATION OF SMAD7 EXPRESSION
10/181,603 ISIS0075-101	July 17, 2002	B. Monia et al.	To Be Determined	1651	ANTISENSE MODULATION OF SMAD7 EXPRESSION
09/732,199 6,379,960 ISIS0076-100	December 6, 2000 April 30, 2002	I. Popoff et al.	M. Schmidt	1635	ANTISENSE MODULATION OF DAMAGE- SPECIFIC DNA BINDING PROTEIN 2, p48 EXPRESSION
09/920,668 6,482,644 ISIS0077-100	August 1, 2001 November 19, 2002	L. Cowsert	M. Schmidt	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
09/922,146 6,566,133 ISISO078-100	August 1, 2001 May 20, 2003	L. Cowsert	T. Gibbs	1635	ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION

-	Filing Date Issue Date	Inventor(s)	Examiner	Art Title Unit	Title
09/487,445 6,258,600 ISIS0079-100	January 19, 2000 July 10, 2001	H. Zhang et al. M. Shibuya	M. Shibuya	1635	1635 ANTISENSE MODULATION OF CASPASE 8 EXPRESSION
10/181,177 ISIS0079-101	July 12, 2002	H. Zhang et al.	To Be Determined	1632	H. Zhang et al. To Be Determined 1632 ANTISENSE MODULATION OF CASPASE 8 EXPRESSION

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DOCKET NO.:RTS-0212

"Express Mail" Label No.: RE918916888US Date of Deposit: 9 12 200

ASSICNMENT

WHEREAS, we Donna T. Ward, residing at 41349 Magnolia Street, Murrieta, California 92562 and Andrew T. Watt, residing at 1500 Shadowridge Dr.. Apt. 154, Vista, California 92083 hereinafter referred to as the assignors, are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Case No. RTS-0212 entitled Antisense Modulation of ribonuclease L Expression; filed concurrently herewith; and

WHEREAS, Isis Pharmaceuticals Inc. hereinafter referred to as the assignee, of 2292 Faraday Ave, Carlsbad, California 92008 is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time a request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or

Page 1 of 3

DOCKET NO.:RTS-0212

their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Lett rs Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Dated: (30/01

COUNTY OF SAN DUGO

This day of weight 200/, before me personally came the above-named Donna T. Ward, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/she executed the same of his/her own free will for the purposes set forth therein.

LANE B.D. SCHWARTZ
Commission # 1196197
Notary Public - Colifornia
San Diego County
My Comm. Exches Sep 13, 2002

Page 2 of 3

DOCKET NO.:RTS-0212

Dated:

Andrew T. Watt

COUNTY OF SER Diego

This day of Apple Man, 200, before me personally came the above-named Andrew T. Watt, who executed the foregoing Assignment in my presence, and who acknowledged to me that he/she executed the same of his/her own free will for the purposes set forth therein.

LANE B.D. SCHWARTZ Commission # 1196197 Notary Public - California San Diego County My Comm. Expires Sep 13, 2002

page 3 of 3